
The diagnosis of limbal stem cell deficiency.

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Authors: Qihua Le, Jianjiang Xu, Sophie X Deng

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Public Summary:

Limbal stem cells (LSCs) maintain the normal homeostasis and wound healing of corneal epithelium. Limbal stem cell deficiency (LSCD) is a pathologic condition that results from the dysfunction and/or an insufficient quantity of LSCs. The diagnosis of LSCD has been made mainly based on medical history and clinical signs, which often are not specific to LSCD. Methods to stage the severity of LSCD have been lacking. With the application of newly developed ocular imaging modalities and molecular methods as diagnostic tools, standardized quantitative criteria for the staging of LSCD can be established. Because of these recent advancements, effective patient-specific therapy for different stages of LSCD may be feasible.

Scientific Abstract:

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